

## ABSTRACT OF THE DISCLOSURE

A multiplex communication system includes a scaling circuit for controlling, in response to a scaling control signal, the signal level of a digital multiplex signal digital generated by a modulation circuit; a variable attenuation circuit for attenuating the signal level of the RF signal output from a quadrature modulation circuit in response to an attenuation control signal; and a control signal generating circuit for generating a scaling control signal in response to the effective value of the digital multiplex signal generated by the digital modulation circuit and in accordance with a digital conversion value corresponding to a desired input level of the quadrature modulation circuit, for supplying its output to the scaling circuit, for generating an attenuation control signal in response to the scaling control signal, and for supplying it to the variable attenuation circuit.